a localised cavity, into which a posterior ulcer had burst. This at once explained the symptoms, and it is instructive to have discovered the cause of the symptoms and the reason why we were unable to find a rupture.

Remarks by Dr. Renton.

One of the most fatal events that happens is rupture of a gastric or intestinal ulcer, and therefore it is essential that without delay the rupture should if possible be closed. Until recently, 95 per cent. of the cases of ruptured gastric ulcer died, and as the larger proportion of these are women from 14 to 30 years of age, it is most important that the symptoms be promptly recognised. As regards the symptoms, they vary according to whether the ulcer is on the anterior or posterior surface of the stomach. If posterior, there are more organs for the stomach to be attached to, and therefore the symptoms are not so marked. The rupture, however, takes place anteriorly in 84 cases out of 100. A patient with previous symptoms of indigestion with or without history of hæmorrhagic vomiting who is suddenly seized with acute pain in the upper abdomen with collapse, rapid pulse, temperature 97°, intense pain in the neck, with suffocating feeling, and in addition clear percussion in the liver region, with superficial gurgling over the upper abdomen, may be regarded as having a ruptured gastric or intestinal ulcer. The sooner that abdomen is opened the better, and if you have been wrong, and there is no rupture, you have with proper precaution done no harm. If you delay, you may lose your patient. During the last year, it is encouraging to find that a number of cases of ruptured gastric ulcer have been recorded as successfully operated upon. Their success mainly depended on early recognition of the condition by the practitioner in attendance.

A CASE OF HÆMATORRACHIS.

By WILLIAM BAIN, M.D., F.R.C.S.E., M.R.C.P.Lond.,
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Spinal meningeal hæmorrhage not due to injury is so exceedingly rare as a cause of death that I think the following case is worth recording.

On the morning of December 22nd, 1894, I received an urgent message to see a housemaid. I was told that the patient, being troubled with constipation, had taken the preceding night two pills which were given her by a friend. She had a good night, got up about 6 A.M., and after dressing went downstairs feeling well. Half an hour afterwards the bowels were moved, and on returning to the kitchen she complained that she felt numb "all over," and had difficulty in walking. After resting some time and not feeling any better she was assisted upstairs.

I saw her about 8 A.M., and found her in a very curious condition. She was propped up in bed complaining of difficulty in breathing, pain in the back of the neck, and loss of motion, and numbness in the upper and lower extremities. Except that she looked pale there was nothing unusual in her expression. She answered my questions intelligently but spoke slowly, with some difficulty, and in a low tone. She told me she was 18, had been anæmic about six months ago, but previous to that, and quite recently, she had been in excellent health. Her catamenia were regular and normal; the temperature was 98°, the pulse was 52 and very weak, and respirations 16 a minute. I gave her a tablespoonful of brandy diluted, which she drank slowly, and in a couple of minutes the pulse was 74. The pupils were normal and reacted to light. She could not move the left arm nor the right leg, but she could move the left leg with an effort and the fingers of the right hand slowly. The knee-jerks were absent; sensation was distinctly lessened but not abolished. She could feel the prick of a pin in both arms and legs, but she was slow in perceiving it. I hurriedly examined her chest and abdomen but detected nothing abnormal. While I was examining her she asked me to leave the room as she wished to use the bed pan; but before it could be placed under her there was a very copious watery evacuation of the bowels, and immediately after she became collapsed and died in a few minutes, the heart continuing to beat after respiration had ceased. The composition of the pills could not be ascertained. Subsequently her mistress recollected that on the morning previous to her death the girl remarked on entering her bedroom that she felt a peculiar reeling sensation as if she were drunk. Her relatives were not aware of there being any case of hæmophilia in the family, and her fellow servant was certain that the girl had not received any injury. Her medical adviser informed me that she only suffered slightly from anæmia. Her blood had not been examined.

On *post-mortem* examination there were no signs of violence. The body was well developed and well nourished. The thoracic and abdominal organs were perfectly normal. The brain also was normal; in fact I have never examined healthier organs. In examining the spinal canal from the back, we first removed the spine and transverse processes of the seventh cervical vertebra and worked upwards. We found nothing abnormal until we came to the third cervical. There we saw a clot between the dura mater and the spinal canal, the larger portion of the clot being on the right side. The dura mater was bloodstained. The clot was comparatively small, and only extended from the second to the third cervical vertebra, the dura mater above the second cervical being normal in appearance, thus showing that the clot was formed *in situ*. Dr. Simcock assisted me at the *post-mortem* examination.

Spinal meningeal hæmorrhages may occur outside the dura mater or within it. Gowers considers extra-meningeal hæmorrhage the more common, while Osler thinks intra-meningeal the more frequent. In the extradural variety the blood comes from the large plexus of veins which lie between the dura mater and the bone.

Apart from injury and very occasionally aneurysm, the causes of this rare condition are not obvious. It is easily understood that it may occur in purpuric states, and in the hæmorrhagic forms of acute specific diseases, although even in these it is very uncommon. It has also been attributed to prolonged muscular exertion.

Regarding the cause in this particular case, I cannot suggest even a far-fetched theory. The question one naturally asks oneself is, Do slight cases of anæmia bear any relation, and, if so, what, to cases of spontaneous hæmorrhage?

The symptoms in this case were indicative of a hæmorrhage above the origin of the phrenic nerves. Evidently there must have been some oozing on or before the morning previous to her death, when she complained of feeling as if she were drunk, and possibly the straining at stool may have caused the larger hæmorrhage which produced the fatal termination.

REMARKS ON THE ETIOLOGY, SYMPTOMS, AND TREATMENT OF LATAH, WITH A REPORT OF TWO CASES.

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The functional nervous affection which takes its name from a Malay word latah (nervous or ticklish) is of great interest, owing to its comparative rarity and very obscure pathology. A short residence in the ulu or interior of one of the vastest Malay States has afforded an unusual opportunity for making these notes.

Case I.—Timah, aged 44, native of Kelantan, midwife, was first seen on April 3rd, 1897, at Kuala Lipis, Pahang. The patient, a married woman, has had four children; two died in infancy. She could not tell much about her family history. There is apparently no evidence of latah, either in direct or collateral lines. Besides malarial fever and ordinary parasitic skin diseases—the usual afflictions of her race—she contracted syphilis some years ago. Menstruation is said to have commenced about the age of 10 years. It has now ceased. For some time—she could not say exactly how long—she has been latah. For the last two years she has complained of regurgitation of fluids from the mouth through the nose. She is a fairly well nourished woman with a natural expression. The chest is well developed, and the heart and lungs are normal. Pulse 80, weak. The knee-

jerks are exaggerated; there is no ankle-clonus. The pupils are normal in size, and act to light. In the roof of the mouth are two small round holes in the middle line, one in the soft palate, the other perforating the hard palate. The palate is not otherwise deformed. During a quiet conversation and during her physical examination the patient responded readily to what she was asked, but appeared to be nervous about answering. On being suddenly startled by a loud exclamation she had a slight nervous tremor, and was henceforth completely latah for the time being. She could now be induced by the verbal suggestion of anyone present, supplemented by appropriate gestures, to laugh or cry, sing, dance, or pray alternately, and advance or retreat at will. For example, I told her to strike the inspector of police, who was sitting near me, and for whom she had great respect, whereupon she responded "Strike, strike," and struck him heavily in the chest several times. No other suggestion being at once offered she seemed to recover her senses instantaneously as it were, and carried her hands to her head, looking round with a perplexed expression, evidently not having been responsible for her previous actions. This quick recovery with the disconcerted attitude occurred many times during the intervals of the suggestions. Towards the close of this pitiable exhibition, which lasted about half an hour, the patient was gradually robbed of her power of self-consciousness and command. She invariably repeated aloud the suggestions offered to her, and not only imitated grimaces, however absurd, but mimicked different qualities of voice, and repeated strange English words with remarkable accuracy. On being handed a box of matches and told to eat it, the operator at the same time pretending to masticate, she had no hesitation in commencing and declaring it delicious; but on the suggestion of another person that it was pork, she readily threw the box away with an expression of great disgust. Upon being told that a tiger was in the room she exhibited no alarm; but it being suggested that it was about to attack her she also appeared ready to attack, although frightened. At last she was evidently becoming exhausted, and asked for a glass of water. The pulse was now 100, and she was trembling. When she had half finished the water it was suddenly suggested to her that it contained poison, and that she had better throw it away. She at once dashed both glass and its contents on the floor. On recovering her natural state, and being questioned quietly as to her conduct, she could give no explanation; she was good-tempered throughout. It was very evident to all the Europeans present that the exhibition had not been premeditated with the idea of causing either diversion or pity.

Case II.—A Pahang woman, aged about 40, living near Kuala Lipis, was first seen on April 4th, 1897. The patient is married, and her youngest child is 6 months old. She is an advanced case of latah and no history can be made out on account of her persistent repetition of each question asked. She is supposed to have been latah for the last fifteen years. She is a poorly nourished woman, and has a tired expression. The aspect is dejected, but her features are symmetrical. Her hair is turning grey. The heart and lungs are normal, the pulse weak, the knee-jerks are very brisk, and ankle-clonus can be readily produced. The eyes are normal, as is also her gait. She is garrulous, chattering to herself. On being startled, this patient acted just as the former case, but throughout she appeared to be frightened and anxious to retire. Repetition of the verbal suggestions was very noticeable. It being suggested, she nursed a felt hat as if it were her baby, even to the length of giving it the breast. On being assured, however, that it was only a hat she flung it down and assumed the perplexed attitude of the former patient. She showed concern at the suggestion and gestures of taking off her garments, but would have completely disrobed nevertheless, if allowed to do so. During the intervals of shock and suggestion she did not recover herself half so readily as in the case of the Kelantan woman. She was not so good-humoured either during her fit. The easy elicitation of ankle-clonus in this case recalls to mind the term "spinal epilepsy" which is sometimes used under other circumstances.[1]

Like many other affections, latah has probably existed for a long time before being recognised as a disease. Among the few published accounts in English, one of the most important is by Dr. W. Gilmore Ellis,[2] in which he recognises latah as a special disease. It is also described in a recent textbook by Dr. B. Scheube.[3] Other descriptions principally take up the symptomatology of latah. Amongst them is a graphic account by the Resident-General of the Malay States.[4] As regards this disease, in view of the absence of detailed statistics, only a general consideration of the relation of age, sex, heredity, religion, geographical extension, and common facts can be gathered. In the majority of cases the symptoms seem to begin during middle life, and in women to be mostly pronounced at the menopause; at the same time, latah may appear earlier or later in life. It is more frequent in women than in men, but it certainly occurs also in the male sex.

There is no doubt that in this disease heredity has a great, though perhaps a not well-defined, influence. The transmission in an exaggerated form of a primordial Malay quality such as conservatism tainted by the influence of some old dormant superstition may be a factor in the etiology. The ancient superstitious faith of the Malays before their conversion to Mohammedanism still survives in their custom of ber-hantu. This witchcraft which has been described by Mr. Swettenham[4] is actually used by the native physicians in the treatment of sick persons. It bears an analogy to the religious and mystical element which pervaded the ecstatic disorders of the fifteenth, sixteenth, and seventeenth centuries, and which still prevails in the faith healing of to-day. Besides ber-hantu many exorcisms which the ear of devils cannot tolerate are commonly used by the natives of Malaya. The pure Mohammedan religion does not appear to have any influence in the causation of latah. It is the mixture of religion and superstition with the fearful belief in devils, familiars, and ghosts so common among the Malays which may have a constraining influence. The natural quality of imitativeness is well developed in the Malay mind. A morbid proclivity towards it must be an exciting cause of latah. The trick which latah persons have of verbally repeating the suggestions which they are about to carry out shows how deeply engraved this impression must be.

Hereditary antecedents such as syphilis, or any neurotic disease, do not seem to have any certain relation to the etiology. Consanguinity may have some influence, for intermarriages are very common among the Malays themselves. It is not unlikely that children become affected through family association, and it is said that tickling them to excess will predispose them to become latah. Proof by tracing the life history of individuals is wanting to justify a conclusion. The children of acclimatised Chinese settlers who have intermarried occasionally become latah in after-life—that is to say, they are not born latah. It is said that Eurasians also more rarely become affected. Social position and hygiene appear to have no influence in the causation of this disease. Latah, it is true, is usually met with among the poor inhabitants of obscure native villages, but in Singapore and in the larger towns many cases may be observed. Although the hygiene of the village is not good, nevertheless a Malay never forgets the privacy, delicacy, and retirement almost generally observed elsewhere in satisfying the calls of Nature. A regular habit of body, and cleanliness at a neighbouring stream are among the principal rules of his life.

It seems to differ from the "latak" mentioned in *Quain's Dictionary of Medicine*[5] and the "lata" or "délire à Java" noted by Bordier,[6] in not being distinctly epidemic. The varieties are, however, manifestly akin. The geographical extension of genuine latah may be said to be confined to the Malay Peninsula and the East Indian Archipelago. This limitation suggests the idea that a humid climate may have some influence in the causation; but the apparent identity which exists between latah and the miryachit of Siberia[7] must be borne in mind. Besides its identity with the "tara" of Siberia, it seems, indeed, to share an affinity with the emotional diseases of most other countries; for example, with those of Griqualand, Norway, and Iceland, and with the "ramaninjana" of Madagascar, the "jumping disease" of North America, and the "shaking disease." In the Malay Confederated States cases are more evident in certain districts, such as Kedah, than in other parts, such as Perak.[4] On the whole it is not rare.

It seems almost impossible to define clearly the period of onset of latah. In nature it is essentially chronic, so that, without tragic complications it may last for many years. When the typical symptoms of the fit are developed there is no difficulty in recognising the disease. Those who are affected always present the curious exhibition of creatures who are unnaturally susceptible to the influence of subjective suggestion. There are at least two remarkable characteristics —(1) the induction of an attack by means of a sudden surprise, a startling appeal, or a direct command, and (2) the sequel of an extraordinary servile imitation of that which may appear indicated. In women an involuntary use of indecorous language is often a primary symptom of their temporary loss of volition. The provocation, whether accidental or wilful, physical or by word of mouth, must be sudden. It appears to be the effect of shock which finally overbears the balance of an unstable nervous system.

It would be difficult to classify the varieties of latah; variation in degree must obviously occur. In different individuals there may be a variation in mental tone during the attack and a greater or less degree of incapacity following its decline. Often at the close of an exhibition the patient, as if overcome by excitement or tremulous ecstacy, falls into a swoon. On recovery he is quite well, and is able to follow his occupation like any ordinary person. It seems that, for the time being, an advanced case of latah might be completely in the hands of an unprincipled operator. Then, on the impulse of the moment, any unreasonable act might unconsciously, as it were, be performed. Examples in which latah has been shown to play any part in the production of a crime are however, I believe, happily unknown. Although it may be generally evident that the power of self-control is absent, yet that this depends upon a definite and recognised disease may be far more difficult to prove. The medico-legal aspect of latah might consequently be of great importance. From the more or less constant grouping of symptoms it is evidently a distinct disease. It ought, therefore, to depend upon the abnormal condition of one or more organs. There can be no doubt that the mind is affected, but it is difficult to say whether this is the sole cause of the disease. There is no reason to suppose that it, any more than the Malay amok, is a modern disease. An exact reproduction of the original form does not now probably exist. It would be therefore unreasonable to surmise that the enforced burden of a complex civilisation has caused its development. It does not seem to have been increased in any way by the influence of recent education of boys under Government direction. In fact it is less common among men than in Malay women, who, as a class, are still uneducated in a modern sense. The gradual removal of ignorant superstition by means of a lucid education may indeed prove to be the best prophylactic of the disease.

How far the influence of morbid impulse may go in causing both the state of latah and the blind passion of âmok merits special attention. In both cases—self-control being lost for the time being—the attention is mainly occupied by a single idea—in the latah woman, by an uncontrollable desire to imitate, in which the servile portion of human nature is unconsciously displayed; in the âmok man, by a reckless idea to persist in killing, in which the wild beast part of man comes uppermost.

Latah is necessarily paroxysmal in its manifestation. A gamut, if I may be allowed the expression, of such high-wrought feelings as surprise, amusement, vexation, indignation, rage, dismay, and furious frantic jealousy, which must have occurred in the case reported by Mr. Swettenham,[4] could not remain long in the same tone. This element of intermission is of significance. It may be inferred from it that no structural change affects the nervous system, especially as the general health remains unaffected. There is no indication of a progressive lesion; it is never fatal. Self-hypnotisation is clearly depicted in the clinical picture. In the words of Mr. Ernest Hart, as applied to hypnotism,[8] the latah person during her fit, is "but a marvellous and God-created machine abased and degraded by the abolition of intelligence and self-restraint." Anyone or anything can reduce her to this abnormal condition.

It would appear, then, to be an obscure psychical condition, having its pathogenic origin perchance with both hysteria and hypnotism in a neurosis which lowers nerve force and brings about an abnormal reflex discharge of it. Bearing in mind, however, that the bias of the eccentricity inclines in one direction only, it might with amôk be more practically viewed as a variety of monomania. At the same time, it is well to note that in the clinical cases there are no indications of degeneracy such as anatomical or physiological stigmata, unless the morbid emotional condition may be regarded as a physiological stigma.

The Malays themselves appear satisfied with the simple knowledge that a person is latah. They do not look upon it as being an illness in any way, but in general magnanimously refrain from influencing the sufferers to any extent. They are, however, ready to excuse even the most extravagant demonstration. Any proposal to treat the patient in an asylum would be good-humouredly rejected.

The cure of latah in the individual seems to be impossible until a precise knowledge of its pathology is obtained and verified, if possible, by means of *post-mortem* examination. Up till now this disease has not been affected by any remedy. The extraordinary mimetic tendency of monkeys might perhaps by experiment be developed into a condition identical with latah, and so afford knowledge which would lead to its cure. The aim of general treatment would appear to be to promote the *mens sana in corpore sano* by keeping both digestion and strength as perfect as possible, and at the same time, in order to make the patient's life happier, to shelter him as much as possible from the sportive suggestions of casual bystanders. Displays of this kind for the purpose of amusement cannot be too strongly deprecated, for one cannot but suppose the march of this peculiar disease to be influenced by the number of fits induced, and to be fostered by a lack of moral control.

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[1] Bristowe, *Theory and Practice of Medicine.* [2] *Journal of Mental Science,* 1896. [3] *Die Krankheiten der warmen Länder.* [4] F. A. Swettenham, *Malay Sketches.* [5] Ecstacy. [6] *La Géographie Médicale.* [7] Described in *Quain's Dictionary of Medicine.* [8] *Hypnotism, Mesmerism, and the New Witchcraft.*

EXCISION OF SCAPULA FOR SARCOMA IN THE INFRASPINATUS MUSCLE, OCCURRING IN A GIRL AGED 8 YEARS: RECOVERY WITH USEFUL LIMB.

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[With pathological note by L. R. Sutherland, M.B., C.M.Glasg., Senior Assistant to the Professor of Pathology in the University of Glasgow, and Pathologist to the Royal Hospital for Sick Children Glasgow.]

I publish the following as a contribution to the already not inconsiderable literature of similar cases.

A. M., aged 8 years and 9 months, consulted me at the Central Dispensary on December 9th, 1896, with complaint of swelling at the back of the left shoulder, painful in certain positions of the arm.

The mother stated that four days previously the child, while playing with her brothers and sisters, got a "pull" on the left shoulder. On the following day some pain was complained of when at drill in school, being elicited when the hands were placed behind her with rotation inwards of the upper limb. The swelling was first observed this morning (December 9th, 1896), when the girl was stripped for washing, and she was brought to the dispensary on this account.

Family History.

On the mother's side there have been thirteen deaths from consumption and other tuberculous affections. The father's side of the house is strong and healthy. Of present family two died young, one of "pleurisy" and the other of "tabes" (mesenterica). Some months ago the patient herself suffered from "inflammation of the lungs," followed by a cold from which she has but recently recovered.